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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/799,827 | 03/12/2004 | Alfred S. Gates JR. | K-1977 | 8510 |
| 27877 | 7590 | 02/07/2007 | | |
| KENNAMETAL INC. P.O. BOX 231 1600 TECHNOLOGY WAY LATROBE, PA 15650 | | | EXAMINER TURNER, ARCHENE A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1775 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 02/07/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/799,827 | Applicant(s) GATES ET AL. | |
| | Examiner Archene Turner | Art Unit 1775 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/6</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2,4-6,22, 23,29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ljungberg (5,980,988).

The rejection is maintained for reasons of record in the previous Office action. Applicant's arguments filed 10/31/06 have been fully considered but they are not persuasive. The applicant argues that since the process is different than the instant invention the product is not necessarily the same as the claimed product.

The applicant is reminded that an invention defined in a product by process claim is a product, not a process (*In re Bridford*, 357 F. 2d 679, 149 USPQ (CCPA 1966)). When the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product in a product by process claim, the burden is on the applicant to present evidence from which the examiner could reasonably conclude that the product differs in kind from those of the prior art (*In re Brown*, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)). This burden is NOT discharged solely because the product was derived from a process known to the prior art (*In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)).

The applicant has failed to provide factual evidence to the contrary that the instant product is different in kind from the reference and thus the rejection stands since the reference explicitly discloses the claimed alumina coating with claimed morphology on the claimed substrate used in the claimed application.

Also the applicant is reminded that a reference must be taken in totality. Even though the example discloses a particular temperature, the reference discloses a range that anticipates the claimed temperature. The applicant has failed to provide evidence that the outside of this claimed value, but within the disclosed range of the reference produces a different product in kind and thus the rejection also stands.

3. Claims 8-9,11,13,14,22,24,29-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Ruppi ("Chemical vapour deposition of $k - Al_2O_3$ ").

The rejection is maintained for reasons of record in the previous Office action. Applicant's arguments filed 10/31/06 have been fully considered but they are not persuasive. Grant & Hackh's chemical dictionary describes "lenticular" as having the shape of a lentil or lens. The applicant argues that since the reference discloses the shape of the alumina as columnar not lenticular the morphology is not the same. The examiner disagrees. Lens can be columnar. The applicant has failed to provide factual evidence the alumina in the reference does not possess the claimed shape and thus the rejection stands.

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4. Claims 15,16, 22,25 are rejected under 35 U.S.C. 102(b) as being anticipated by Yi-Feng et al ("Effects of an Electroplated....Nickel Based Superalloy").

The rejection is maintained for reasons of record in the previous Office action. Applicant's arguments filed 10/31/06 have been fully considered but they are not persuasive.

Firstly the applicant is reminded that the claims do not disclose the amount of the kappa and alpha alumina in the claimed coating and thus 2 embodiments of the reference anticipate the claims, the one with trace or minute amounts of either kappa or alpha alumina.

The applicant is reminded that an invention defined in a product by process claim is a product, not a process (*In re Brideford*, 357 F. 2d 679, 149 USPQ (CCPA 1966)). When the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product in a product by process claim, the burden is on the applicant to present evidence from which the examiner could reasonably conclude that the product differs in kind from those of the prior art (*In re Brown*, 459 F. 2d 531, 173 USPQ 685 (CCPA 1972); *In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)). This burden is NOT discharged solely because the product was derived from a process known to the prior art (*In re Fessman*, 489 F. 2d 742, 180 USPQ 324 (CCPA 1974)).

The applicant has failed to provide factual evidence that the reference does not possess the claimed morphology, and thus the rejection stands. The applicant has not

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provided evidence to the criticality of the claimed temperature range, nor shown that a coating produced at the disclosed 1020 produces a different product in kind.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ljungberg (5,980,988) .

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ljungberg (5,980,988) in view of Colmbier et al ("Formation of Mixed....by Chemical Vapour Deposition") or Ruppi et al (5,700,569).

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruppi ("Chemical vapour deposition of $k - Al_2O_3$ ") .

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruppi ("Chemical vapour deposition of $k - Al_2O_3$ ") in view of Colmbier et al ("Formation of Mixed....by Chemical Vapour Deposition") or Ruppi et al (5,700,569).

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10. Claim 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yi-Feng et al ("Effects of an Electroplated....nickel Based Superalloy").

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yi-Feng et al ("Effects of an Electroplated....nickel Based Superalloy") in view of Colmbier et al ("Formation of Mixed....by Chemical Vapour Deposition") or Ruppi et al (5,700,569).

12. The rejection is maintained for reasons of record in the previous Office action. Applicant's arguments filed 10/31/06 have been fully considered but they are not persuasive. These rejections rely on the primary references above which have not been overcome and thus the combination rejections stand.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Archene Turner whose new telephone number is (571) 272-1545. The examiner can normally be reached on Monday, Wednesday through Friday from 10:30 am. to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Please remember to include on the fax, the art unit 1775, serial number and Examiner's name.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'A. A. Turner', with a long horizontal flourish extending to the right.

A. A. Turner
Primary Examiner
Group 1700